### Final High Level 3 - 8 Operational Form Construction Blueprints

These are high level test form construction blueprints for grades 3-8 mathematics. More specific grade level operational test form construction blueprints which include the distribution of points and tasks across domains can be found beginning on page 5 of this Appendix.

**Grade 3** 

Assessment Component	Task Type	Calculation Aid?	# of Tasks	Points per Task	Total Points
PBA	I	N	8	1	8
PBA	I	N	2	2	4
PBA	II	N	2	3	6
PBA	II	N	2	4	8
PBA	III	N	2	3	6
PBA	III	N	1	6	6
EOY	I	N	44	1	44
EOY	I	N	5	2	10
Total			66		92

**Grade 4** 

Assessment	Task Type	Calculation	# of Tasks	Points per	Total Points
Component		Aid?		Task	
PBA	1	N	8	1	8
PBA	1	N	2	2	4
PBA	II	N	2	3	6
PBA	=	N	2	4	8
PBA	<b>=</b>	N	2	3	6
PBA	III	N	1	6	6
EOY	1	N	38	1	38
EOY	1	N	8	2	16
Total			63		92

Assessment Component	Task Type	Calculation Aid?	# of Tasks	Points per Task	Total Points
PBA	I	N	8	1	8
PBA	I	N	2	2	4
PBA	II	N	2	3	6
PBA	II	N	2	4	8
PBA	III	N	2	3	6
PBA	III	N	1	6	6
EOY	1	N	38	1	38
EOY	1	N	8	2	16
Total			63		92

Grade 6

Assessment	Task Type	Calculation	# of Tasks	Points per	Total Points
Component		Aid?		Task	
PBA	1	N	6	1	6
PBA	I	Υ	2	1	2
PBA	1	Υ	2	2	4
PBA	II	Υ	2	3	6
PBA	II	Υ	2	4	8
PBA	III	Υ	2	3	6
PBA	III	Υ	1	6	6
EOY	I	N	27	1	27
EOY	I	Υ	5	1	5
EOY	I	Υ	2	Either 2 or 4	6
				points/task	
EOY	I	Υ	8	2	16
Total			59		92

Assessment Component	Task Type	Calculation Aid?	# of Tasks	Points per Task	Total Points
PBA	I	N	6	1	6
PBA	I	Υ	2	1	2
PBA	I	Υ	2	2	4
PBA	II	Υ	2	3	6
PBA	II	Υ	2	4	8
PBA	III	Υ	2	3	6
PBA	III	Υ	1	6	6
EOY	I	N	17	1	17
EOY	I	Υ	15	1	15
EOY	I	Υ	9	2	18
EOY	I	Υ	1	4	4
Total			59		92

**Grade 8** 

Assessment Component	Task Type	Calculation Aid?	# of Tasks	Points per Task	Total Points
PBA	I	N	8	1	8
PBA	I	Υ	2	1	2
PBA	ı	N	1	2	2
PBA	11	Υ	2	3	6
PBA	11	Υ	2	4	8
PBA	III	Υ	2	3	6
PBA	III	Υ	1	6	6
EOY	1	N	24	1	24
EOY	1	Υ	10	1	10
EOY	I	N	5	2	10
EOY	I	Υ	3	2	6
EOY	I	N	1	4	4
Total			61		92

### **Draft** High Level High School Operational Form Construction Blueprint

The course level operational test form construction blueprints are still under development by PARCC. This is a high level test form construction blueprint for all courses. The overall number of points and number of tasks should remain consistent throughout all high school courses. If PARCC makes any revisions, they will be only slight revisions. The course level operational test form construction blueprints where the points and tasks will be distributed across domains will be made available in early November.

Assessment Component	Task Type	Calculation Aid?	# of Tasks	Points per Task	Total Points
PBA	ļ	N	2	1	2
PBA	ı	Υ	8	1	8
PBA	П	Υ	2	3	6
PBA	П	Υ	2	4	8
PBA	III	Υ	1	4	4
PBA	III	Υ	2	6	12
EOY	I	N	8	1	8
EOY	I	Υ	11	1	11
EOY	ı	Υ	14	2	28
EOY	ı	Υ	5	4	20
Total			55		107

## PARCC Mathematics Draft<sup>1</sup> Form Construction Table - Grade 3

### **TYPE I TASKS**

			Number of Tasks					
	M/A/S	Calculation Aid?	OA	NBT	NF	MD	G	Int <sup>2</sup>
PBA(1a)	M	No	3 1*	1*	2	1		
PBA(1b)	M	No	1 1*					
EOY(1)	М	No	10-11 1*	3*	7-8	5-6 3*	1*	
EOY (2)	A/S	No		4		4	5	
EOY(3)	M/A/S	No			0-1	1	0	3-4

# Tasks	Pts/Task	Total Points
8	1	8
2	2	4
31	1	31
13	1	13
5	2	10

_	OA	NBT	NF	MD	G	Int <sup>3</sup>
PBA(2)	2		0-1	1-2		

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

<sup>\*</sup>Securely-held content

<sup>&</sup>lt;sup>1</sup> Contingent on psychometric review
<sup>2</sup> Integrative across domains, i.e., integrative at the grade level
<sup>3</sup> Integrative across domains, i.e., integrative at the grade level

	Base explanations/reasoning on the properties of operations.  Base explanations/reasoning on the relationship between addition and subtraction or the relationship between multiplication and division.	Base arithmetic explanations/reasoning on concrete referents such as diagrams (whether provided in the prompt or constructed by the student) connecting the diagrams to a written method.  Base explanations/reasoning on a number line diagram.	Distinguish correct reasoning expression from that which is flawed and – if there is a flaw in the argument – present corrected reasoning.	Present solutions to multi- step problems in the form of valid chains of reasoning, using symbols such as equal signs appropriately, or identify or describe errors in solutions to multi-step problems and present corrected solutions.
PBA(2)	1	1	1-2	0-1

#	Σ Tasks ×	Total
Tasks	Pts/Task	Points
4	$\begin{array}{cc} 2\times3pt \ +2\times\\ 4pt \end{array}$	14

_	Solve Multistep contextual word problems with degree of difficulty appropriate to Grade 3.
PBA(3a)	2
PBA(3b)*	1*

# Tasks	Pts/Task	Total Points
2	3	6
1*	6	6

<sup>\*</sup>Securely-held content

# PARCC Mathematics Draft<sup>4</sup> Form Construction Table - Grade 4

### **TYPE I TASKS**

			Number of Tasks					
	M/A/S	Calculation Aid?	OA	NBT	NF	MD	G	Int <sup>5</sup>
PBA(1a)	M	No	1	1 1*	2 2*	1*		
PBA(1b)	М	No	0-1	0-1	1			
EOY(1)	M	No	5 4*	7 2*	8 1*	1*		2
EOY(2)	A/S	No	1-2			5	1-2	
EOY(3)	M/A/S	No	1		4	1		2

#Tasks	Pts/Task	# Points
8	1	8
2	2	4
30	1	30
8	1	8
8	2	16

	2	4	15			
	OA	NBT	NF	MD	G	Int <sup>6</sup>
PBA(2)	0-1	1	2-3			

# Tasks	$\Sigma  Tasks \times Pts/Task$	# Points
4	$2 \times 3pt + 2 \times 4pt$	14

<sup>\*</sup>Securely-held content

<sup>&</sup>lt;sup>4</sup> Contingent on psychometric review <sup>5</sup> Integrative across domains, i.e., integrative at the grade level

<sup>&</sup>lt;sup>6</sup> Integrative across domains, i.e., integrative at the grade level

	Base explanations/reasoning on the properties of operations  Base explanations/reasoning on the relationship between addition and subtraction or the relationship between multiplication and division.  Reason about the place value system itself	Base arithmetic explanations/reasoning on concrete referents such as diagrams connecting the diagrams to a written (symbolic) method.  Base explanations/reasoning on a number line diagram	Distinguish correct explanation/rea soning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning.	Present solutions to multi-step problems in the form of valid chains of reasoning, using symbols such as equals signs appropriately, or identify or describe errors in solutions to multi-step problems and present corrected solutions.	
PBA(2)	1	1-2	1	0-1	

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	# Points
4	$2 \times 3pt + 2 \times 4pt$	14

	Multi-step contextual word problems with degree of difficulty appropriate to grade 4	Multi-step contextual problems with degree of difficulty appropriate to grade 4
PBA(3a)	2	
PBA(3b)*		1*

# Tasks	Pts/Task	# Points
2	3	6
1*	6	6

<sup>\*</sup>Securely-held content

# PARCC Summative Assessment Specifications for Mathematics PARCC Mathematics Draft Form Construction Table – Grade 5

### **TYPE I TASKS**

	_		Number of Tasks							
	M/A/S	Calculation Aid?	NBT	NF	OA	MD	G	Int		
PBA(1)	M	no	1 2*	2 1*	1*	1				
PBA (1b)	М	no	1	1						
EOY(1)	М	no	7 1*	11 7*		2				
EOY(2)	A/S	no			3	2	5			
EOY(3)	M/A/S	no	2	2		2	1	1		

# Tasks	Pts/Task	Total Points
8	1	8
2	2	4
28	1	28
10	1	10
8	2	16

	NBT	NF	MD		
PBA(2)	1-2	2	0-1		

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

<sup>\*</sup>Securely-held content

<sup>&</sup>lt;sup>7</sup> Contingent on psychometric review

	Base explanation/ reasoning on the properties of operations.  Base explanations/reasoning on the relationship between addition and subtraction or the relationship between multiplication and division.	Base arithmetic explanations/ reasoning on concrete referents such as diagrams (whether provided in the prompt or constructed by the student in her response), connecting the diagrams to a written (symbolic) method.  Base explanations/reasoning on a number line diagram (whether provided in the prompt or constructed by the student in her response).	Reason about the place value system itself.	Distinguish correct explanation/ reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning.	Present solutions to multi-step problems in the form of valid chaisn of reasoning, using symbols such as equals signs appropriately or identify or describe errors in solutions to multi-step problems and present corrected solutions.
PBA(2)	1-2	1-2	0-1	0-1	0-1

#	∑ Tasks ×	Total
Tasks	Pts/Task	Points
4	$\begin{array}{c} 2\times3pt \ +2 \\ \times4pt \end{array}$	14

	Solve multi-step contextual word problems with degree of difficulty appropriate to Grade 5.		
PBA(3a)	2		
PBA(3b)*	1*		

# Tasks	Pts/Task	Total Points
2	3	6
1*	6	6

<sup>\*</sup>Securely-held content

# PARCC Mathematics Draft<sup>8</sup> Form Construction Table – Grade 6

### **TYPE I TASKS**

				Number of Tasks						
	M/A/S	Calculation Aid?	RP	NS	EE	NF	NBT	MD	G	SP
PBA(1a)	М	no	1	1	1	3*				
PBA(1b)	М	yes			2					
PBA (1c)	М	yes	1		1					
EOY(1a)	М	no	2	6	4	3*	4*	1*		
EOY(1b)	М	yes	3		2					
EOY(2)	A/S	no		3					1	3
EOY(3a)	М	yes	2							
EOY(3b)	М	yes	1		2					
EOY(3c)	A/S	yes							4	1

# Tasks	Pts/Task	Total Points
	1	
6	1	6
2	1	2
2	2	4
20	1	20
5	1	5
7	1	7
2	2 or 4pts/task	6
3	2	6
5	2	10

	RP	NS	EE	NF	Int <sup>9</sup>
PBA(2)	0-1	1-2	1-2		

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

<sup>\*</sup>Securely-held content

<sup>&</sup>lt;sup>8</sup> Contingent on psychometric review <sup>9</sup> Integrative across domains, i.e., integrative at the grade level

		Base arithmetic		Construct,
		explanations/ reasoning on		autonomously, chains
		concrete referents such as		of reasoning that will
		diagrams (whether		justify or refute
		provided in the prompt or		propositions or
		constructed by the student		conjectures.
	Base explanation/	in her response),		
	reasoning on the	connecting the diagrams to		Present solutions to
	properties of	a written (symbolic)		multi-step problems
	operations.	method.		in the form of valid
			Given an equation	chains of reasoning,
	Base	Base	or system of	using symbols such
	explanations/reasoning	explanations/reasoning on	equation, present	as equals signs
	on the relationship	a number line diagram or	the solution steps	appropriately or
	between addition and	coordinate plane diagram	as a logical	identify or describe
	subtraction or the	(whether provided in the	argument that	errors in solutions to
	relationship between	prompt or constructed by	concludes with	multi-step problems
	multiplication and	the student in her	the set of	and present corrected
	division.	response).	solutions (if any).	solutions.
PBA(2)	1	1-2	0-1	1-2

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

	Solve multi-step contextual word problems with degree of difficulty appropriate to Grade 6.	Reasoned estimates: Use reasonable estimates of known quantities in a chain of reasoning that yields an estimate of an unknown quantity.				
PBA(3a)	2					
PBA(3b)*	0-1*	0-1*				

# Tasks	Pts/Task	Total Points
2	3	6
1*	6	6

<sup>\*</sup>Securely-held content

# PARCC Mathematics Draft<sup>10</sup> Form Construction Table - Grade 7

### **TYPE I TASKS**

				N	lumber of T	asks		
	M/A/S	Calculation Aid?	NS	EE	RP	G	SP	Int <sup>11</sup>
PBA(1a)	M	N	1 2*	1	1 1*			
PBA(1b)	М	Υ			2			
PBA (1c)	М	Υ		2				
EOY(1a)	M	N	5 2*	7 1*	2			
EOY(1b)	M	Y	1*	3*	2 2*			
EOY(2)	A/S	Y				1	6	
EOY (3a-3c)	M	Y		2@2	1@4 and 2@2			
EOY (3d)	A/S	Y				3-4	1-2	

# Tasks	Pts/Task	Total Points
6	1	6
2	1	2
2	2	4
17	1	17
8	1	8
7	1	7
5	4@2 1@4	12
5	2	10

	NS	EE	RP	G	SP	Int <sup>12</sup>
PBA(2)	2 (but no more than 7 points in total)	1	1			

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

<sup>\*</sup>Securely-held content

Contingent on psychometric review
 Integrative across domains, i.e., integrative at the grade level
 Integrative across domains, i.e., integrative at the grade level

	Base explanation s/reasoning on the properties of operations.	Base explanations/reasoni ng on the relationship between addition and subtraction or the relationship between multiplication and division.	Given an equation or system of equations, present the solution as a logical argument that concludes with the set of solutions (if any).	Base explanation/r easoning on a coordinate plane diagram.	Construct autonomou sly, chain of reasoning that will justify or refute proposition s or conjecture s.	Base explanati ons/reaso ning on a number line diagram.	Present solutions to multistep problems in the form of valid chains of reasoning, using equals signs appropriately or identify or describe errors in solutions to multi-step problems and present corrected solutions.
PBA(2)	0-1	0-1	0-1	0-1	0-1	0-1	1-2

#	$\Sigma$ Tasks $ imes$	Total
Tasks	Pts/Task	Points
4	$2 \times 3pt + 2 \times 4pt$	14

	Multistep contextual word problems	Micro-models: Autonomously Apply a technique from pure	Reasoned estimates: Use reasonable estimates
PBA(3a)	2		
PBA(3b)*	0-1*	0-1*	0-1*

# Tasks	Pts/Task	Total Points
2	3	6
1*	6	6

<sup>\*</sup>Securely-held content

# PARCC Mathematics Draft<sup>13</sup> Form Construction Table - Grade 8

### **TYPE I TASKS**

					Numbe	r of Task	s		
	M/A/S	Calculation Aid?	NS	EE	F	G	SP	RP*	Int <sup>14</sup>
PBA(1a)	М	No	1*	3	1	1		2*	
PBA(1b)	М	No				1			
PBA(1c)	М	Yes		2					
EOY(1a)	М	No	3*	8 3*	3	1		1*	
EOY(1b)	М	Yes		4	1	2		2*	
EOY(2a)	S	No	2		2		1		
EOY(2b)	S	Yes					1		
EOY(3a)	М			2					
EOY(3b)	М	No		3					
EOY(3c)	М	No	_			3			
EOY(3d)	A/S	Yes			1	1	1		

# Tasks	Pts / Task	Total Points
8	1	8
1	2	2
2	1	2
19	1	19
9	1	9
5	1	5
1	1	1
3	1-4pt	4
3	2-2pt	4
3	2	6
3	2	6

	NS	EE	F	G	SP	Int <sup>15</sup>
PBA(2)		2	0 – 1	1 – 2		

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

<sup>\*</sup>Securely-held content

<sup>&</sup>lt;sup>13</sup> Contingent on final psychometric review
<sup>14</sup> Integrative across domains, i.e., integrative at the grade level
<sup>15</sup> Integrative across domains, i.e., integrative at the grade level

	Base reasoning on the principle that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.	Given an equation or system of equations, present the solution steps as a logical argument that concludes with the set of solutions (if any).	Construct, autonomously, chains of reasoning that will justify or refute propositions or conjectures.	Present solutions to multi- step problems in the form of valid chains of reasoning, using symbols such as equals signs appropriately or identify or describe errors in solutions to multi-step problems and present corrected solutions.	Apply geometric reasoning in a coordinate setting, and/or use coordinates to draw geometric conclusions.
PBA(2)	0 – 1	0 – 1	1-2	0 – 1	1-2

# Tasks	$\Sigma$ Tasks $ imes$ Pts/Task	Total Points
4	$2 \times 3pt + 2 \times 4pt$	14

### **TYPE III TASKS**

		Micro Models:	Reasoned	
	Solve multi-step	Autonomously	estimates: Use	
	contextual word	Apply a	reasoned	
	problems	technique	estimates	
PBA(3a)	2			
PBA(3b)*	0-1*	0-1*	0-1*	

# Tasks	Pts / Task	Total Points
2	3	6
1*	6	6

<sup>\*</sup>Securely-held content